**Debate on Issues Related to Technological Developments in Biology**

**Introduction:**

It is important you develop an ability to critically examine an issue, whether or not you agree with it or not. As an assignment for this unit, you will carry out formal debates in small groups related to the topics of technological developments in biology.

**Instructions:**

1. You will be working in groups of **6** and will be doing research on a topic chosen from the list below.

2. Your group will be divided into two teams with 3 students each:

-If you are on the **affirmative** team, you are arguing for this technological development and

your statement is:

*Be it resolved that the benefits of technological developments in biology outweigh the cons.*

-If you are on the **opposition** team, you are arguing against this technological development

and your statement is:

*Be it resolved that the impact of technological developments in biology has been significant*

*and outweighs the benefits.*

3. **List of topics to choose from**: (if you have an alternate topic that you think is relevant, you may speak with your teacher). Only **ONE** group can do each topic.

**TECHNOLOGICAL DEVELOPMENTS IN BIOLOGY:**

* Cloning
* Stem cell research
* Live organ transplants
* Transgenic organisms
* DNA screening
* Drug research for a genetic disorder

**MY TOPIC: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

**I AM ON THE AFFIRMATIVE OR NEGATIVE SIDE: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

**MY GROUP MEMBERS ARE: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

4. **Suggestions:** When you are thinking of arguments, think about it from numerous perspectives in order to develop a broader range of arguments. For example, what are the benefits/risks of the particular activity in terms of the economy, ethics, environment, human health, politics, science and technology, etc. Also, it shouldn’t be you presenting your personal opinion. This assignment will strengthen your ability to think from different viewpoints which is an important skill to have! Your debate must include facts extracted from research.

5. You must complete the debate preparation handouts that summarize your stand on the issue and

the supporting evidence

* Overview sheet of the issue (completed as a group of 6) **Due:** **Tuesday Dec 5th**
* My side of the issue sheet (Each person in the group of 3 should focus on a particular area for their arguments such as environmental, ethical, economical, etc. and this should be made clear on the sheet)

6. You can use the debate organizer sheet in your group of 3 to organize your arguments and research you are using to support them. It will not be marked, but is a good research tool.

6. Use at least 3 sources of information and include a reference list in APA format.

7. Prepare a brief (maximum 2 minutes) oral presentation. See Debate procedures for clarification and structure of debate.

**Due Date**: **Monday, December 11th & Tuesday, December 12th, 2017**

**Evaluation:**

1. Evaluation will be based on the rubric provided.

2. Please make sure that all of the information is in your own words (unless otherwise indicated). Plagiarism will result in a mark of **ZERO**.

**Debate Preparation: MY SIDE of the issue**

Each person will individually complete this page for their argument on their side of the issue.

|  |  |
| --- | --- |
| **My team's side of the issue is…** |  |
| **My team's 3 key arguments are…**  \*Should be the same for your team.\* |  |
| **The details of my argument are...**  (What is your individual argument?) |  |
| **The evidence for my argument is…**  Explain at least 2 pieces of evidence that prove your argument. |  |
| **APA REFERENCES** |  |

**EVALUATION SCHEME (YOUR SIDE OF THE ISSUE):**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | Level 1 (50-59%) | Level 2 (60-69%) | Level 3 (70-79%) | Level 4 (80-100%) |
| -All of the required information is accurate & supported by evidence  /5 | Many inaccuracies in information. | Some inaccuracies in information. | Most information is accurate. | All required information is accurate. |
| -Provides a clearly stated point that connects well with the central argument.  /5 | Makes connections with limited effectiveness. | Makes connections with some effectiveness. | Makes connections with considerable effectiveness. | Makes connections with a high degree of effectiveness. |

**APPLICATION: /10 ( %)**

**EVALUATION SCHEME (DEBATE):**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | Level 1 (50-59%) | Level 2 (60-69%) | Level 3 (70-79%) | Level 4 (80-100%) |
| -Clarity and precision of language  -In your own words  /5 | Expresses and organizes ideas and information with limited effectiveness | Expresses and organizes ideas with some effectiveness. | Expresses and organizes ideas and information with considerable effectiveness. | Expresses and organizes ideas and information with a high degree of effectiveness. |
| - Well-organized information in the debate showing evidence of unity, flow, coherence, etc. (all arguments clearly tied to an idea)  /5 | Debate is not well organized and no evidence of unity or coherence between arguments | Debate is organized but little evidence of unity and coherence between arguments | Debate is somewhat organized and group member’s arguments show considerable unity | Debate is extremely organized and all group member’s arguments are connected, showing evidence of unity and flow |
| -Always polite, supportive and respectful of peers,  -Team consistently used gestures, eye contact, tone of voice and a level of enthusiasm in a way that kept audience attention.  /5 | Communicates for different audiences with limited effectiveness. | Communicates for different audiences with some effectiveness. | Communicates for different audiences with considerable effectiveness. | Communicates for different audiences with a high degree of effectiveness. |

**COMMUNICATION: /15 ( %)**

Topic: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Affirmative Team: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Opposition Team: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Debate Preparation: Overview of the issue**

|  |  |
| --- | --- |
| **What?**  - **What is your issue about?**  Use your own words to explain what this issue is. |  |
| **Why?**  Why is this issue important? Why is this an issue that people do not agree on? |  |
| **How?**  How are people trying to deal with / solve this issue? |  |